

JSTARS aircraft and light ground station modules.

BY DENNIS J. REIMER and RONALD R. FOGLEMAN

The Army and Air Force are natural partners in the conduct of combat operations on and over land. Since day-to-day operations are intertwined, particularly in areas of service support, we often take this partnership for granted. It was forged during World War II, Korea, Vietnam, and most recently in the Gulf War. The most important teamwork occurs on the battlefield, where our combined capabilities produce a synergistic increase in joint combat power that provides a decisive advantage over an adversary. The Army-Air Force team is robust and forward looking, unequalled among the armed forces of the world. We

intend to strengthen that partnership as we work together in the future.

General Dennis J. Reimer, USA, and General Ronald R. Fogleman, USAF, are the chiefs of staff of their respective services.

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Form Approved OMB No. 0704-0188 Cooperation does not imply that we have identical views on every issue, nor that we should be combined. Each service optimizes its unique strengths. National security depends upon distinct warfighting capabilities on land, at sea, and in the air. Moreover, each service brings separate core capabilities—the missions they perform best—to the joint table. One lifetime is barely sufficient to master every skill needed to fight and lead in one medium of war. Learning to fight jointly in three is a tough business—leveraging unique capabilities, specialties, and individual competencies to the warfighting advantage of all.

Such efforts are especially important in a resource constrained environment. Together we can

relations between the Army and Air Force became strained as each tried to incorporate lessons learned in the Gulf selectively apply advances in technology to compensate for the redundancies that we have lost through the force drawdown. This process of leveraging one another's strengths builds on current doctrinal foundations to evolve a more

mature, complementary perspective of joint operations. The savings will be measurable in both lives and resources, and ultimately by mission success.

The Persian Gulf War provided a glimpse of the dramatic changes in warfare and results of rapid evolutions in technology. It also demonstrated the tremendous power which the Army and Air Force could generate by working together and with the naval services and coalition partners. After an intense air offensive disabled Iraq's key capacities and reduced its warfighting capability, the ground offensive, supported by maximum tempo air operations, demonstrated the effectiveness of teamwork in defeating an adversary and minimizing American casualties.

Both of our services gained important insights into 21st century military operations from the Gulf War; however, there are divergent interpretations of that brief conflict. Relations between the Army and Air Force became strained as each tried to incorporate and capitalize on lessons learned in the Gulf. We recognized doctrinal disparities and quickly began an effort of cooperative review to ensure our preeminence as the world's finest air-land team.

Developing Understanding

Since the Gulf War, in what has become an annual event, senior leaders of our respective services have met to discuss lessons learned as well as opportunities for improving joint operations. At the Army-Air Force Warfighter Talks in 1994 we set up a working group to tackle tough issues.

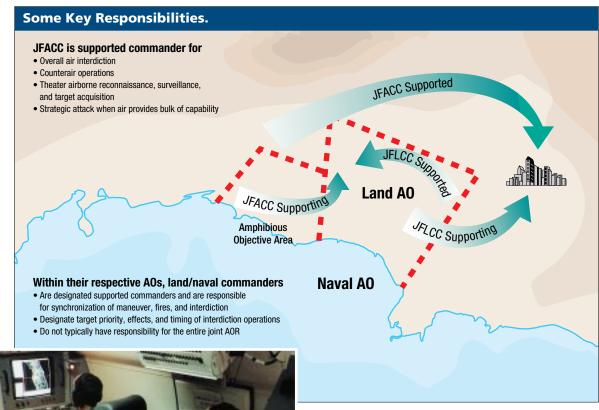
Chartered by the deputy chiefs of staff for operations and plans of both services, the group took on the job of identifying and resolving these issues. Building on a heritage of teamwork and mutual respect, Army and Air Force officers have devoted months to clarifying matters of common interest and finding useful solutions. This has led to shared understandings, increased trust, and pragmatic agreements. Numerous organizations, including Air Combat Command, U.S. Army Training and Doctrine Command (TRADOC), 1st Battlefield Control Element (BCE) at Fort Bragg, and 9th and 12th Air Forces, have helped the group. After a mid-year review revealed there were more areas of agreement than disagreement between our two services, the working group refocused on air and missile defense and on joint control measures.

The first issue centers on controlling air and missile defense assets not directly assigned to corps commanders and on theater missile defense (TMD) attack operations in the area of operations (AO) of land component commanders (LCCs). Since CINCs often employ echelon-above-corps (EAC) air and missile defense assets as theater assets, the Air Force held that such units should be put under the operational control (OPCON) of joint forces air component commanders (JFACCs). As stipulated in joint doctrine, JFACCs are normally area air defense commanders (AADCs) and will usually control all theater air and missile active defense efforts. Likewise, the Air Force saw TMD attack operations—actions to locate and destroy hostile missile launchers and their associated command, control, and supporting infrastructure regardless of their location—as counterair efforts under JFACC purview. The Army viewed TMD attack operations inside the land AO as an integral part of the LCC scheme of maneuver and supporting counterfire operations.

The group also examined joint control measures because of the apparent friction over which component commanders should plan and control deep operations beyond fire support coordination lines (FSCLs). The Air Force considered JFACCs as best suited to coordinate operations beyond FSCLs, while the Army thought LCCs should plan and synchronize fires in the entire land AO. When the working group could not completely resolve TMD or joint control measures, we agreed to address them in a four-star review at the Army-Air Force Warfighter Talks in December 1995, the results of which are described below.

Joint Doctrine

Service concerns arise when areas of responsibility potentially overlap, creating questions over control of combat assets. But on a fluid, dynamic battlefield joint force commanders (JFCs) cannot





Interior of JSTARS aircraft.

permit disagreements on issues such as targeting and missile defense to remain unresolved. Regardless of how complementary our views on joint operations might be, specific responsibilities produce legitimate differences among component commanders. We must minimize the differences and move toward greater understanding of one another's strengths and limitations.

Each component has area and functional responsibilities as well as custody of the people and resources under its command. These responsibilities may intersect when components work together. Thus we must allow flexibility for responsibilities to shift during various phases of a campaign and act to minimize mutual interference and maximize mutual support. What may be optimum for one component can come at the expense of others—by decreasing combat power or increasing risk. Joint doctrine is an excellent starting point for assisting LCCs and air component commanders (ACCs) in efforts to resolve any overlaps. Together we must learn to tailor air-land solutions to circumstances, missions, risks, and opportunities at hand.

Commanders normally seek to conduct operations to gain maximum advantage at minimum risk to their forces. For example, ground commanders stress counterfire and maneuver operations while air commanders stress strategic attack, counterair, and interdiction; yet all seek to attack deep targets and enemy air defenses to provide maximum flexibility for their forces. Such operations are not always mutually supportive, especially when resources are scarce.

Joint Publication 3-0, *Doctrine for Joint Operations*, published in September 1993, offers direction for every element of a joint force. It instructs JFCs, as senior commanders, to provide guidance and set priorities. Moreover, it establishes the latitude required to optimize and fine-tune arrangements between land and air forces under various

as partners in the air-land team, we are committed to smooth, seamless operations throughout the theater circumstances. This publication serves as a common baseline for understanding both in and among services, and also within our warfighting arrangement, the unified com-

mand structure. No component should develop doctrine that directly contradicts this validated baseline.

Joint doctrine ascribes authority and responsibility to JFCs and provides a framework for conducting joint operations and designating the roles of supporting and supported commanders. Both services recognize that LCCs are normally supported commanders in assigned AO boundaries and ACCs are normally supported commanders for theater air operations. Joint doctrine provides flexibility to allow JFCs maximum latitude to devise the best solution for a mission. If conflicting priorities arise, JFCs will determine the precedence of priorities. However, a solid basis of trust between component commanders will go a long way towards alleviating potential problems.

Key to Success

Coordination among components is critical on the battlefield. One of the best methods for ensuring proper coordination of operations is sound command and control (C2). Modern warfare requires us to increasingly share real-time, common views of the battlefield. We must understand overlapping as well as occasionally intersecting needs of component commanders, reconciling their different views with improved risk management techniques. The commanders have optimum tools in their staffs and headquarters to conduct detailed planning and execute missions. Moreover, they liaise with other components to facilitate both the flow of information and timely decisions. Senior liaison elements are important in sharing the broad concerns of component

BCE is a critical Army element attached to the senior command and control agency within the Air Force, the Air Operations Center (AOC). Similarly, the Air Force provides Tactical Air Control Party (TACP) representatives at key Army headquarters. BCE and TACP should be fully staffed with highly trained personnel to support component commanders. Senior members of both agencies must understand the intent of commanders as well as provide timely, informed decisions.

As partners in the air-land team, mutual understanding of command relationships must be strong and clear. Just as Generals George S. Patton and O.P. Weyland, the respective commanders of III Army and 19th TAC in World War II, recognized the need for a strong C² relationship between land and air components, we are committed to smooth, seamless operations throughout the theater.

Areas of Concern

Using the efforts of the working group as a point of departure, the senior leadership of our services prepared five agenda items for discussion last December: the role of the Joint Targeting Coordination Board (JTCB), joint control measures, command and control arrangements for air and missile defense, offensive counter-air and TMD attack operations, and dual hatting of JFCs. Many of these issues overlap and some may never be resolved. But when possible, candor will pave the way for greater understanding. In addition, we covered tangential areas that impact our overall relations on the battlefield. Further advances in connectivity, coordination, and perception of sister service doctrine will decrease differences and increase mutual trust.

Joint Targeting Coordination Board. The JTCB concept has been controversial since the Gulf War. The Air Force held that the board would hinder operations, while the Army contended that it was necessary to establish targeting priorities. Joint Pub 3-0 codifies JTCB without going into great detail. JFCs typically create JTCBs and define their roles. The services accept the vision of JTCB, but we agree it must be focused at a macro level. JTCB as a planning support function assists components in following the intent of JFCs in executing operations by preparing targeting guidance, refining joint target lists, and reviewing target information. The board must maintain a campaign-level perspective and should not be involved at levels best left to the component commanders, such as selecting specific targets and aimpoints or developing attack packages.

Joint Control Measures. The heart of this doctrinal discussion concerns operations beyond FSCLs but within the land force AO. Since both commanders seek to maximize results in this area consistent with their intent to shape the battlespace, it represents the greatest overlap of land and air objectives. The land component's capability to exploit deep attacks before an enemy can



Patriot battery during Roving Sands '94.

adjust to them will vary with depth, terrain, resistance, and resources. Air component capabilities will vary less with distance, but since air forces operate beyond FSCLs on a normal, continual basis, ACCs must also manage risks to their forces. Coordination and deconfliction are essential to reducing duplication, conserving resources, maximizing results, and managing risks in this area. Managing risks requires careful design and tuning of control measures and authority to minimize restrictions on all forces and maximize combat power. JFCs will normally establish forward AO boundaries and adjust as necessary to balance the needs of LCCs to rapidly maneuver with the needs of ACCs to rapidly mass and employ airpower with minimal constraints.

Between FSCL and AO forward boundaries, LCCs are supported commanders and must coordinate operations with ACCs when possible. LCCs should judiciously use control measures such as FSCLs to facilitate attack operations. ACCs should coordinate attacks inside the land AO to complement support of both the needs of LCCs and the overall theater campaign plans of JFCs. Improved friendly and enemy situational awareness, rapid information sharing, expertise in BCE and TACP,

and more advanced tactics, techniques, and procedures (TTP) will also improve mutual support between the land and air components.

Whenever we discuss targeting the placement of FSCL inevitably comes up. Joint doctrine grants LCCs authority to place this line anywhere within their AO. To maximize the effectiveness of both land and air forces, LCCs should coordinate the placement of this line with ACCs to ensure maximum coverage of all enemy targets with available assets. It is incumbent on each component commander to establish a level of mutual trust with the other commanders to make this relationship work. ACCs must provide LCCs making FSCL decisions with relevant facts that will help them, but must trust LCCs to place FSCLs in the best location to support the objectives of JFCs.

Air and Missile Defense. Coordination of fires naturally leads to this next area of concern. This issue centers on the degree of control the area air defense commander should have over EAC air defense assets. The Air Force holds that JFACCs—who are normally designated as AADCs—are supported commanders for overall theater air and

missile defense and should exercise OPCON over air defense units unassociated with a corps. The Army is reluctant to release such control over its organic EAC air defense assets.

While no one disputes the right of each unit to self defense, we must balance that right with the need for close coordination of fires against enemy threats beyond FSCLs to prevent fratricide. Since JFACCs will be operating forces in this area for counterair, interdiction, strategic attack, and surveillance and reconnaissance, coordination

political and operational pressures on JFCs were the crux of the dual-hatting issue

and deconfliction are crucial. Both services agree that while corps commanders will retain OPCON over their organic air defense units, AADCs as supported commanders will es-

tablish rules of engagement and assign air defense missions for EAC assets. LCCs must communicate their desires but trust AADCs to make the correct decisions.

The Army and Air Force have made great strides in target identification, attack cueing, and responsiveness since the Gulf War, and more improvements are on the horizon. The threat posed by weapons of mass destruction emphasizes the need to share information, tailor countermissile dispositions and response postures, and work together to create the greatest possible risk to enemy missiles. LCCs must communicate their needs to JFACCs/AADCs in developing air and missile defense plans. This close coordination is essential to ensure timely and correct decisions.

TMD Attack Operations. Closely tied to air and missile defense are TMD attack operations. While the Air Force believes TMD is part of the counterair effort requiring theater-wide integration, the Army holds that these operations are broader in scope and considers existing fire support as the most responsive for attacking enemy missiles in an LCC's AO. Regardless of opinions, common sense dictates that between FSCL and the AO forward boundary, LCCs and ACCs must coordinate TMD attack operations to maximize effects and minimize fratricide. There will be times when an airborne asset provides a more timely response to pop-up targets than a corps commander's assets. At other times a corps may have the appropriate weapon. The Air Force is considering increasing the amount of "on-call" assets available for TMD attack operations. With improved connectivity, coordination and approval will become easier. Until that time, current

doctrine provides JFCs with the flexibility to develop the necessary C² arrangements based on the situation in theater.

Dual Hatting. Political and operational pressures on JFCs were the crux of the dual-hatting issue. Because dual hatting a corps commander as a division commander or a numbered air force commander as a wing commander would be irregular, the Air Force contended that a dual-hatted JFC or CINC would also be irregular, resulting in a possible loss of focus on theater or component details. During our discussions, senior Army leaders acknowledged that this could occur, but the likelihood is low. Dual hatting must be handled on a case-by-case basis. CINCs must determine, subject to the approval by the Secretary of Defense, whether to simultaneously retain command of an entire operation as JFC and a component—land, maritime, or air—or to designate another senior leader as component commander. This is in line with joint doctrine. Situation-specific political or operational considerations will influence JFC decisions to retain leadership of a specific functional component in addition to the overall JFC role.

Looking to the Future

In addition to those issues discussed at the Warfighter Talks, there are many areas in which interservice cooperation has made great strides. While the Army-Air Force working group offers an avenue to pursue such developments, other organizations including TRADOC and ACC, Army fire support elements, and various Air Force wings and numbered air forces are constantly striving to enhance Army-Air Force team operations.

To improve TTP, the services have been developing a multiservice targeting TTP under the Air, Land, Sea Application Center (ALSA). Common TTP will allow component commanders to know how other components operate. Common procedures, as well as improved C⁴I, will help ensure proper prioritization, deconfliction, and attack of targets.

There has also been an extensive effort to improve connectivity in combat identification and tracking. Tests conducted by the All Service Combat Identification Evaluation Team (ASCIET) in Gulfport, Mississippi, in September 1995 identified specific areas which needed attention. We must develop both the hardware and processes to pass real-time combat identification data among elements of all services to reduce the possibilities of air-to-surface, surface-to-air, and air-to-air fratricide. Although the work of ASCIET has just begun, its contributions will receive careful attention because we stand to gain much from its successes in the area of combat risk management. The Army and Air Force plan to incorporate

ASCIET into the next Roving Sands and Blue Flag air-land combat exercises.

Integration of this information with evolving capabilities such as the joint surveillance and target attack radar system (JSTARS) and unmanned autonomous vehicles will provide commanders with improved battlefield information. Real-time imagery is a step towards the information dominance that we are striving for.

We are making significant progress in increasing connectivity between Army and Air Force planning and fire control elements. These initiatives have the potential to greatly increase the ability to share and deconflict data on emerging targets in real time. Ongoing work to link the Air Force contingency theater automated planning system (CTAPS) and Army advanced field artillery tactical data system (AFATDS) will ensure our forces put the right weapon on the right target at the right time, increasing effective firepower while reducing waste and delay. Connectivity between air and missile defenses (such as the Army TMD Force Projection Tactical Operations Center and the Air Force combat integration capability) also helps to rapidly deconflict air and surface targets. This is increasingly important as weapons and threats change and a commander's reaction time decreases.

The Army-Air Force Warfighter Talks, as well as working group and interservice efforts, are each small steps towards greater understanding between our services. Improving connectivity, strengthening command relationships, and developing trust are key elements in ensuring the Army and Air Force remain the premier air-land team. We have witnessed numerous advancements over the past year that increase a commander's awareness of the battlefield. By the turn of

the century, through interservice initiatives and systems like JSTARS, our commanders should enjoy increased interoperability and a more complete view of the battlefield. Both technological enhancements and sound joint doctrine are essential in strengthening ties between our services. But great technology and good doctrine alone are insufficient. Without trust and mutual understanding, an enemy could exploit our weaknesses and possibly defeat us.

Trust is based on insight and familiarity, knowing who will do the right thing in the proper way. A soldier's expectation of airpower must be based on the realization that airmen have theater-wide perspectives and responsibilities. An airman must appreciate the vital role of airpower in land combat and understand that air flown in support of LCCs must complement the plans of LCCs. The Army and Air Force depend upon and leverage the capabilities of one another to be decisive in battle. Our separate strengths, as well as differences, will ensure that we remain an air-land team without equal. In fact, no other military will even come close.

Destroyed Iraqi fighter.



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